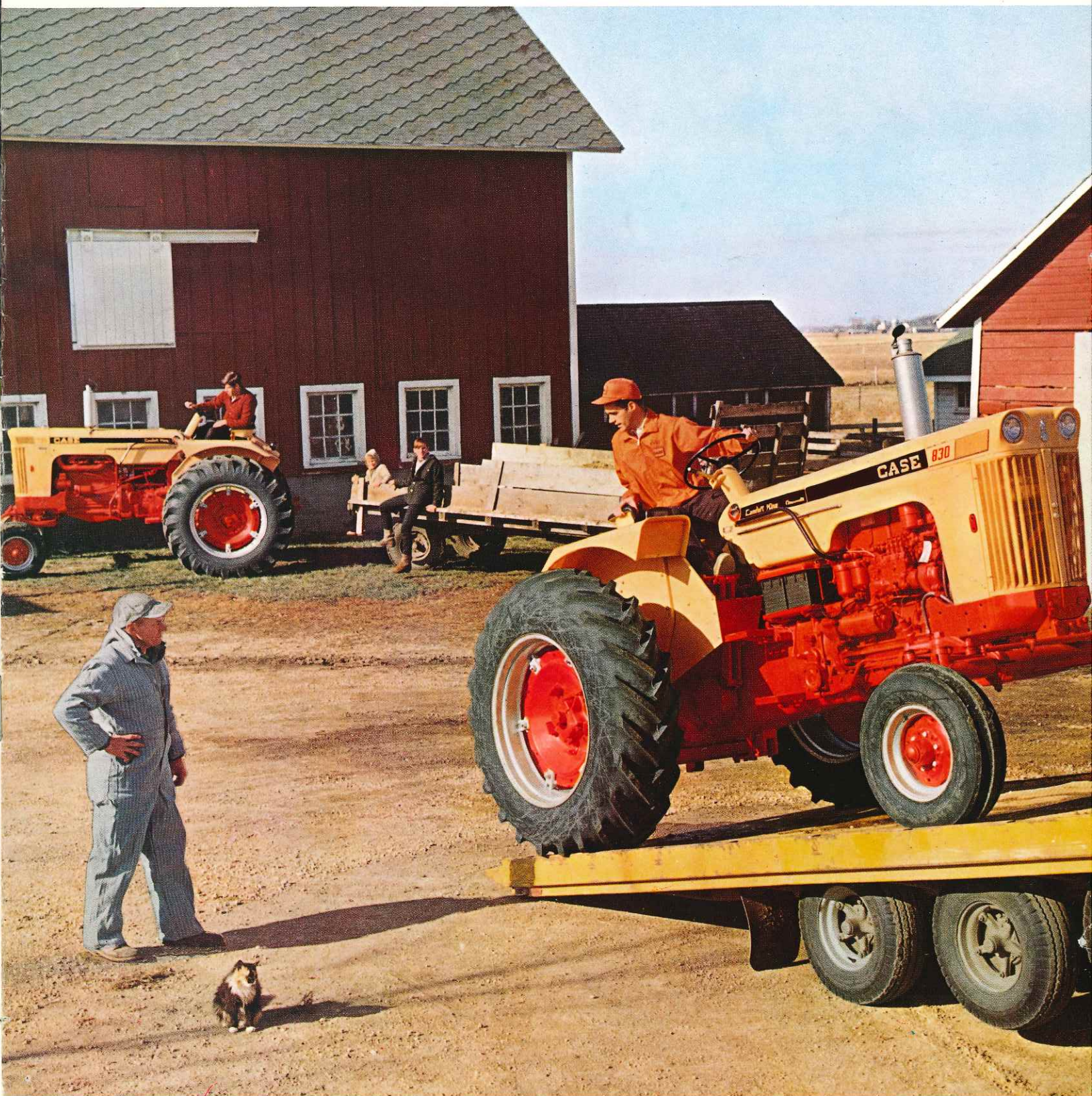
V-3

CASE® TRACTORS

730
830

4-5 PLOW

Hydraulic torque converter or standard 8-speed transmission



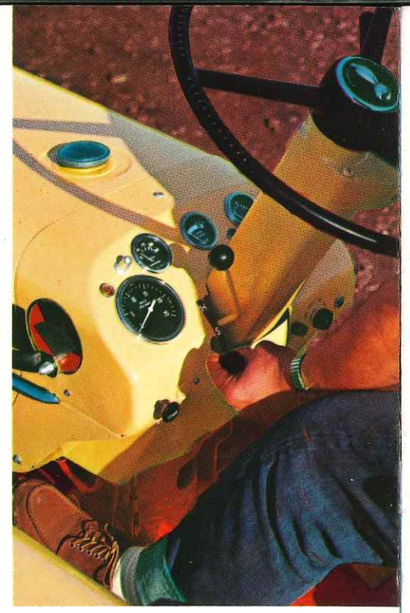
Hydraulic torque converter makes a tractor perform like it's a size bigger

The hydraulic torque converter in a Case 730 or 830 automatically increases pull-power for tough spots up to 100% without a stall or shift.

You've seen many forms of pull-power amplifiers: mechanical torque boosters, on-the-go shifting devices, etc. We invite you to compare the performance and benefits of torque converter Case-o-matic Drive®! And the price — little more than the automatic transmission in your car. And the dependability —Case has the only hydraulic torque converter proved in over 8 years of farm use.

What's your choice? A 4-5 plow 730 or 5-plow 830 . . . standard 8-speed transmission or hydraulic torque converter drive? A demonstration can be an eye opener! You should be owning a Case-o-matic Drive tractor!

Hydraulic torque converter doubles pull-power ...instantly ...automatically. No clutching! No shifting! No stalling!



Hydraulic torque converter drive gives you an infinite number of speeds within each of 8 working ranges. Select the proper gear range for the job, then forget about the traction clutch. Plow all day without clutching, shifting or stalling!

The torque converter senses overloads instantly, automatically provides the exact amount of pull-power required — no more, no less — to pull through tough spots non-stop.

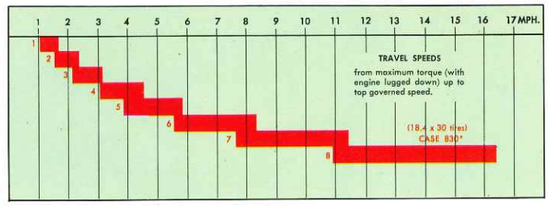
You can slow down at ridges or ditches, waterways or headlands . . . stop . . . then start again smoothly . . . all without shifting. In close quarters — or attaching implements — you have precise inching control with use of the brake and Case-o-matic Drive. No clutching, no special pedals.

The hydraulic torque converter boosts production efficiency. With reserve pull-power, you can confidently plow in a higher gear, add another bottom or use a bigger implement. The engine always runs at optimum speed — is never overloaded. Hydraulic pressure stays up for fast-action implement control. Maintenance for engine and power train is minimum — clutch maintenance almost nil — because the fluid connection cushions shocks. Tire slippage is minimized, thus tire wear is reduced.

Flip the Case-o-matic lever on-the-go (left). Use torque converter or direct drive, whichever is more useful at the moment. Flip to direct drive — locking out the converter — for light work such as cultivating, planting, fertilizing, or spraying chemicals. As you approach a ditch, waterway, or headland, flip to Case-o-matic for easy, precision maneuvering with full hydraulic power.

Hydraulic torque converter drive is especially handy for hauling. You can start in road gear without slipping a clutch, pull heavy loads smoothly out of the field, then flip non-stop to full road speed in direct drive. Flip back to torque converter to hold on an uphill grade . . . or to make safe, stallproof stops and starts at busy highway intersections without clutching-shifting.

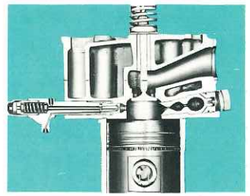
5 heavy tillage speeds give wide working range with standard 8-speed transmission

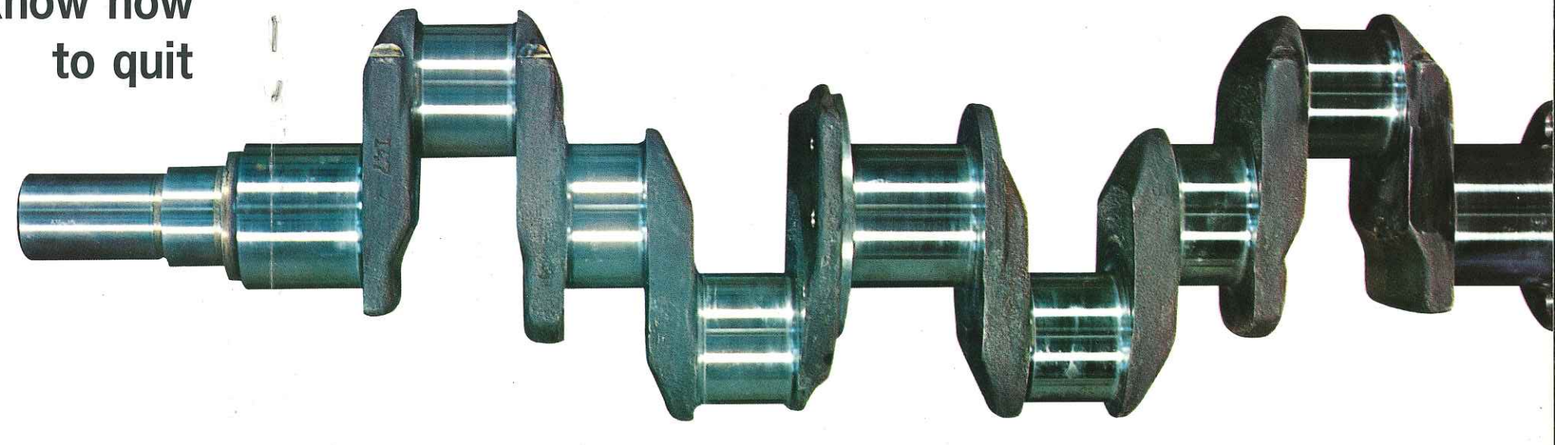


Some tractors require premium-priced, quick-shift devices in order to provide more than 5 or 6 speeds. Case offers 8 speeds in the standard gear transmission — 5 in the heavy tillage range. You're not forced to buy the extra-cost transmission to get speeds enough to handle widely varied jobs properly. And the 8 Case speeds are well-spaced with an unbroken span and wide overlap in the most efficient working range of the engine — between maximum torque and rated speed. Whatever the load, you always have a gear that keeps the engine at or close to full power . . . you have the just-right gear speed for maximum work output, minimum fuel consumption. With Case-o-matic, the 8 speeds combine with the torque converter to supply an unlimited range of speed preferences.

Easy, single-motion shifting. With dual-range shift levers, you control the 730 or 830 heavy-duty transmission and final drive with minimum time and effort. No need to sit and puzzle out which range you must use to get the next faster or slower gear speed. The logical, progressive shift pattern is simple — easy to learn and remember. Shifting between 1st and 2nd, 3rd and 4th takes only a single direct motion. The same pattern applies between 5 and 6, 7 and 8 in high range. Switching from low to high range — or back — is equally simple with the convenient dash-mounted control (left above).

Rugged high-torque power that doesn't know how to quit



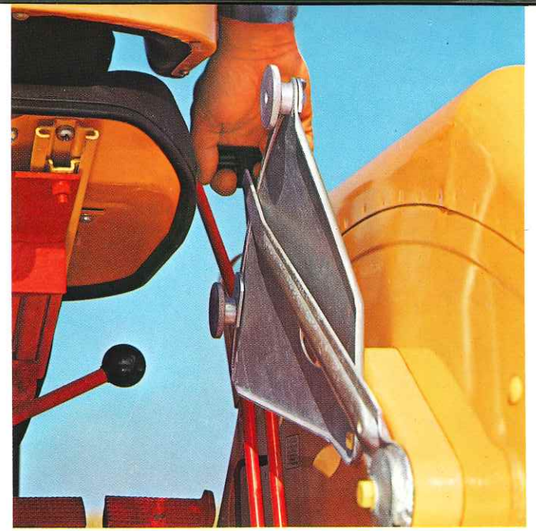


Case high-torque engines are massive power plants, Case-built to lug and last. Big displacement. Big-bore cylinders. Long-stroke pistons. Big-leverage crankshaft. High-torque design that gives you extra pull-power. That means less downshifting, more production every hour.

Big displacement, moderate speed engines assure longer life. Rated speeds are up to 800 rpm's less than some comparably-rated engines. Compare the wear of a 2500 rpm engine with the 1700 rpm Case 730. For an average 1000 hours a year, the 730 makes 48 million fewer turns! Think what that means in decreased wear in a year's time!

Case dependability starts with rugged construction. Diesel and spark ignition engines are built with diesel strength. Both have multiple cylinder heads to prevent distortion, simplify servicing. Both have a heavily-ribbed block that assures solid bearing seats. Crankshaft is supported by wide main bearings — with heavily-bolted bearing caps — one on each side of each piston. Total main bearing area is 84.5 square inches, almost twice that of some comparably-sized tractor engines!

Record-breaking fuel efficiency. Case diesels provide smooth Powrcel controlled combustion. Metered fuel is injected into the Powrcel (left above), then fed back in a gaseous burning state to prolong combustion. This means easy starting, smooth power and outstanding fuel economy. Powrdyne spark ignition combustion chambers (right above) are elongated and set at an angle to valves. Incoming fuel-air mixture swirls past the spark plug side, cooling plugs and exhaust valves, while exhaust gases leave on opposite side. This assures thorough mixing, uniform burning.



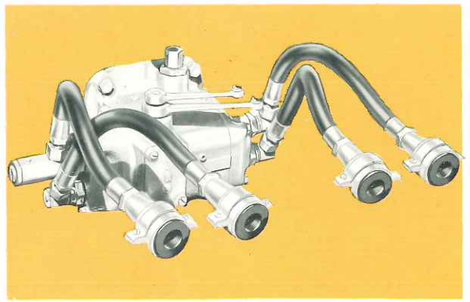
Draft-o-matic® response is smooth and fast — twice as fast as others!

Draft-o-matic senses load changes, transfers weight to rear wheels instantly for increased traction. Reaction is twice as fast as some other draft-control systems — up to 600 cycles per minute! The action is so fast and smooth you scarcely feel it work. This takes you through tough spots non-stop, with minimum depth variation. Draft-o-matic doesn't over-adjust — doesn't cheat on depth — does a good, uniform-depth job of plowing. It eliminates the need for constant depth adjustment. You minimize wheel slippage, maintain a more constant load on the engine, a more constant ground speed. You're left free to concentrate on doing your best possible plowing job. You labor less, do a better job, cover more acres per day.

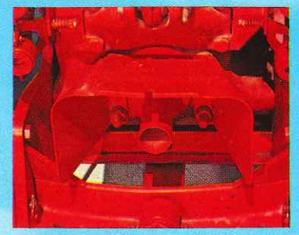
A single Draft-o-matic lever controls raising and lowering of rear-mounted implements, load-depth setting, position control and full float. Draft-o-matic 3-point hitch adapts easily to Category I, II or Case Eagle Hitch implements.

Two separate pumps — less plumbing. You always have full hydraulic power for both implement control and power steering because each has its own separate hydraulic pump. The compact implement control unit — with less than 6 feet of hose and only 8 connections — is rear-mounted. It leaves the platform clear and uncluttered . . . simplifies servicing. Some competitive hydraulic systems have as many as 82 feet of hose, up to 50 individual connections.

New remote cylinders are now available with hydraulic limit stop. This adjusts the full length of the piston rod, provides closer adjustment, and thus better implement control. Includes large piston rod for greater capacity.



Independent power take-off ...hydraulic torque converter gives pto-driven machines first call on engine power



Completely independent of the traction clutch, Case independent power take-off lets you bring pto-driven machines up to correct speed before moving into the crop. You can engage or disengage the pto on-the-go. If necessary, you can stop forward travel with the traction clutch to allow the harvesting machine to clear heavy slugs. Independent pto is standard equipment with either standard 8-speed or Case-o-matic transmission.

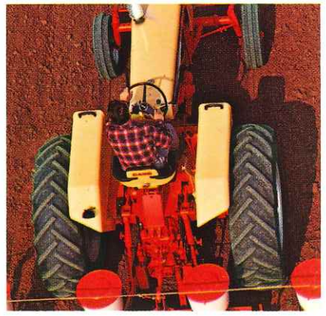
With Case-o-matic, engine power goes directly to the pto shaft. This keeps your baler, forage harvester, spreader sprayer or combine operating at proper speed regardless of variations in drawbar pull or travel speed. Whether the tractor slows down for a hill or a soft spot — or speeds up on a downhill stretch — your engine and pto speed remain more constant.

Case-o-matic gives you another advantage in handling heavy slugs or windrows: you can slow down travel speed with the brakes without reducing engine or pto speed. This permits you to clear the machine automatically . . . without clutching, shifting, stalling or plugging! You keep production up and operating speed at peak efficiency all the time.

Comfort King

Convenience You can mount this powerhouse from either side — on two big mounting steps. Plenty of room to stand and relax on the roomy platform. No seat pedestal or transmission hump to straddle. You stand firmly on the non-skid surface. Raise the seat and lean comfortably against its cushioned edge. Enjoy the cushioned comfort of this human-engineered deluxe seat.* Real armchair comfort with fully adjustable back and arm rests. Adjusts for weight and leg length, too. You sit high out of the dust and heat zone, with full view front and back. Easy-reach controls and easy-see instruments reduce reaching stress and eye strain. You get more work done, feel fresher at day's end.

*Standard on the 830, optional on the 730.



CASE 730 and 830 tractor specifications

Engine

Fuel types
Diesel, gasoline and LP-gas

Displacement
730 diesel — 267 cu. in.
730 spark ignition — 251 cu. in.
830 diesel — 301 cu. in.
830 spark ignition — 284 cu. in.

Cylinders
Number — 4

Bore and Stroke
730 diesel — 4⅛ x 5 in.
730 spark ignition — 4 x 5 in.
830 diesel — 4⅜ x 5 in.
830 spark ignition — 4¼ x 5 in.

Rated speed
730 Dual-Range — 1700 rpm
730 Case-o-matic — 1900 rpm
830 Dual-Range — 1900 rpm
830 Case-o-matic — 1900 rpm

Crankshaft
Hardened and dynamically balanced

Main bearings
Number — 5

Compression ratio
Diesel — 15:1
Gasoline — 7.4:1
LP-Gas — 8.5:1

Cylinder sleeves
Wet, replaceable

Cylinder heads
Type — multiple
Number — 2

Oil system
Gear type pump

Crankcase capacity
With filter — 9 qt.

Cooling system
By-pass pressurized
Capacity — 7.5 gal.

Clutch

Dual-Range
Foot-operated, spring-loaded, single dry disc

Case-o-matic
Hydraulically actuated direct drive and traction

Brakes

Double disc, self-energizing differential

Electrical System

12-volt

Ignition System

Distributor

Fuel System

Capacity
Diesel and gasoline — 31 U. S. gal.
LP-Gas — 35 U. S. gal. (80% full)

Injection Pump (diesel)
Multiple plunger

Hitch

Category II 3-point hitch with load-depth control

Hydraulic System

3-point hitch
Single-lever Draft-o-matic control with lower link sensing

Remote cylinders (double-acting)
2 independent circuits available

Independent PTO

Spline size
1⅜ in.

PTO speed at rated engine speed
Choice of 540 or 1000 rpm

Belt Pulley

Diameter
10½ in.

Face width
7¼ in.

RPM at rated engine speed
730 Dual-Range
920 rpm — 540 pto
1090 rpm — 1000 pto
830 Dual-Range
1027 rpm — 540 pto
1261 rpm — 1000 pto

Case-o-matic models
1027 rpm — 540 pto
1261 rpm — 1000 pto

DIMENSIONS

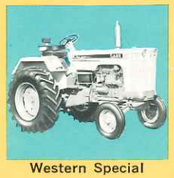
	Dual Front Wheels (15.5-38 tires)	Adjustable Front Axle (15.5-38 tires)	Standard 4-Wheel (14.9-30 tires)
Height to top of hood	73 in.	72 in.	67 in.
Width overall	85¼ in.	85¼ in.	66⅝ in.
Length overall	156 in.	160 in.	143 in.
Wheelbase	92¼ in.	102 in.	83 in.
Crop clearance	26 in.	24 in.	
Rear wheel tread			
Standard	56-88 in.	56-88 in.	58-66 in.
Special	56-108 in.	56-108-in.	52½ and
Front wheel tread	9⅛, 14¼ in.	53-83 in. 48-74 in. 53-73 in. 60-88 in.	57¼ in.

Adjustable front axle

Dual front wheels

Single front wheel

Standard 4-Wheel


Western Special

High clearance

Grove Special (730 only)

Standard Equipment

Anti-freeze solution; 12-volt starter and neutral safety switch; two headlights, combination rear flood and red tail light, flashing safety light (12 volt); swinging drawbar; hand and foot throttles; fenders; hour meter; dual front wheels; muffler; foam cushion seat and back rest with deluxe suspension (830); foam cushion seat and back rest with easy-ride suspension (730); 8-speed transmission; tachometer and speedometer (830); combination tachometer-speedometer (730); rear wheels adjustable 56-88 inches; dual front wheels with 6.00-16 4-ply front tires; cast rear wheels with 15.5-38, 6-ply tires; power take-off (540 rpm); dual remote hydraulic controls.

Diesel only: Intake manifold electric preheater starting aid, water trap, fuel pressure gauge.

Spark ignition only: Distributor ignition.
Case-o-matic only: Torque converter temperature and pressure gauges.

Optional Equipment
(General Purpose only)

Diesel, gasoline or LP-gas engine; deluxe comfort seat and suspension with arm and back rests (730); Case-o-matic Drive; cast power adjustable, universal, or universal power adjustable wheels; 15.5-38 8-ply tires, 15.5-38 6-ply rice tires, 16.9-34 6-ply agricultural tires, 18.4-34 6-ply agricultural or rice tires, or 23.1-30 8-ply tires; dual front wheels with power steering; single front wheel with 7.50-16 or 9.00-10 tire with or without power steering; 48-74 or 53-83 inch adjustable front axle, with or without power steering; 53-73 inch or 60-88 inch heavy-duty adjustable front axles, with or without power steering, with 11.00x16 or 11.00x15 tires; air intake pre-cleaner.

Special Equipment

Draft-o-matic 3-point hitch; 1000 rpm PTO; pto mounted belt pulley; radiator shutter; front end weights; rear wheel weights; hydraulic portable cylinders; hydraulic hoses with couplings; portable cylinder jack pad and base; cigarette lighter; 56-108 inch long rear axle; two cultivating lights; warning lamps; cast front wheels; muffler extension.

The J. I. Case Company reserves the right to make improvements in design and changes in specifications at any time without incurring any obligation to install them on units previously sold.

Every engine tested for over one hour to give you Case assured performance

Case high-torque performance and durability begin at the Case Research and Test Center, one of the most modern in the industry. The best efforts of research are policed on the Case production line. Components and assemblies are subject to the careful scrutiny of Case Quality Control teams. Durability and dependability are their chief responsibilities.

Every tractor is given separate run-in tests for every transmission, hydraulic system, dynamometer tests for every engine, plus final testing of the entire tractor. Case dynamometer-tests every engine for over one hour at varying speeds. This assures you that every Case tractor meets its designated torque efficiency and power specifications.

Financing — Test drive a Case tractor on your own farm — get proof of its capacity-boosting performance. Then have your Case dealer tailor a Crop-Way Purchase Plan to your income and designed for your production and profit. No red tape— no obligation.

J. I. Case Company, Racine, Wisconsin, U.S.A.

CASE®

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J. I. CASE COMPANY

MANUFACTURERS OF AGRICULTURAL AND CONSTRUCTION EQUIPMENT

GENERAL OFFICE, RACINE, WISCONSIN 53404

August 5, 1968

W. N. Wertman, Examiner
U. S. PATENT OFFICE
Group 290
Washington, D.C. 20231

Dear Mr. Wertman:

It is a pleasure to respond to your recent request by sending printed material which we hope contains the information you desire.

Should you wish additional information such as that on special attachments, prices, etc., we recommend that you contact a CASE dealer near you. He is thoroughly familiar with the requirements of your area and the types of equipment needed for efficient, low-cost operation.

Thank you for giving us an opportunity to provide information on CASE quality equipment.

Advertising Department

J. I. CASE COMPANY

Enclosure(s)